(b) The Commandant (G–MSO) approves the substitution of a dry chemical (D) type fire protection system for an A or B type on a case by case basis.

(c) A fire protection system required by this part must meet part 34 of this chapter or be specifically approved by the Commandant (G–MSO).

[CGD 73–96, 42 FR 49027, Sept. 26, 1977, as amended by CGD 82–063b, 48 FR 4782, Feb. 3, 1983; CGD 81–101, 52 FR 7781, Mar. 12, 1987]

§ 153.461 Electrical bonding of independent tanks.

An independent metallic cargo tank that carries a flammable or combustible cargo must be electrically bonded to the tankship's hull.

§ 153.462 Static discharges from inert gas systems.

An inert gas system on a tank that carries a flammable or combustible cargo must not create static arcing as the inert gas is injected into the tank.

§ 153.463 Vent system discharges.

The discharge of a venting system must be at least 10 m (approx. 32.8 ft) from an ignition source if:

(a) The cargo tank is endorsed to carry a flammable or combustible cargo; and

(b) Table 1 requires the cargo to have a PV venting system.

§ 153.465 Flammable vapor detector.

(a) A tankship that carries a flammable cargo must have two vapor detectors that meet § 35.30–15(b) of this chapter.

(b) At least one of the vapor detectors in paragraph (a) of this section must be portable.

§ 153.466 Electrical equipment.

A tankship carrying a flammable or combustible cargo under this part must meet subchapter J of this chapter.

DESIGN AND EQUIPMENT FOR POLLUTION CONTROL

SOURCE: Sections 153.470 through 153.491 appear at CGD 81–101, 52 FR 7781, Mar. 12, 1987, unless otherwise noted.

§ 153.470 System for discharge of NLS residue to the sea: Categories A, B, C, and D.

Unless waived under § 153.491, each ship that discharges Category A, B, or C NLS residue, or Category D NLS residue not diluted to ¹⁄₁₀th of its original concentration, into the sea under §§ 153.1126 and 153.1128 must have an NLS residue discharge system meeting the following:

(a) *Minimum diameter of an NLS residue discharge outlet.* The outlet of each NLS residue discharge system must have a diameter at least as great as that given by the following formula:

$$D = \frac{(Q_d)(\cosine\ \phi)}{5L}$$

where:

D=Minimum diameter of the discharge outlet in meters.

Q_d=Maximum rate in cubic meters per hour at which the ship operator wishes to discharge slops (note: Q_d affects the discharge rate allowed under § 153.1126(b)(2)).

L=Distance from the forward perpendicular to the discharge outlet in meters.

ϕ=The acute angle between a perpendicular to the shell plating at the discharge location and the direction of the average velocity of the discharged liquid.

(b) *Location of an NLS residue discharge outlet.* Each NLS residue discharge outlet must be located—

(1) At the turn of the bilge beneath the cargo area; and

(2) Where the discharge from the outlet is not drawn into the ship's seawater intakes.

(c) *Location of dual NLS residue discharge outlets.* If the value of 6.45 for K is used in § 153.1126(b)(2), the NLS residue discharge system must have two outlets located on opposite sides of the ship.

[CGD 81–101, 52 FR 7781, Mar. 12, 1987, as amended by CGD 81–101, 53 FR 28974, Aug. 1, 1988 and 54 FR 12629, Mar. 28, 1989; CGD 95–028, 62 FR 51209, Sept. 30, 1997]

§ 153.480 Stripping quantity for Category B and C NLS tanks on ships built after June 30, 1986: Categories B and C.

Unless waived under § 153.491, Category B and C NLS cargo tanks on each ship built after June 30, 1986 must have